

**IN THE UNITED STATES DISTRICT COURT
FOR THE EASTERN DISTRICT OF TEXAS
MARSHALL DIVISION**

HEADWATER RESEARCH LLC,

Plaintiff,

v.

SAMSUNG ELECTRONICS CO., LTD and
SAMSUNG ELECTRONICS AMERICA, INC.,

Defendants.

Case No. 2:23-CV-00103-JRG-RSP

JURY TRIAL DEMANDED

**SAMSUNG’S REPLY IN SUPPORT OF ITS MOTION
TO STRIKE EXPERT REPORT OF DR. ANDREAS GROEHN (DKT. NO. 181)**

EXHIBIT INDEX AND NOTES

Exhibit	Description
E	Excerpts of the deposition transcript of Andreas Groehn, Ph.D., taken May 13, 2024
F	Excerpts of the deposition transcript of Dr. Andreas Groehn, taken October 18, 2023

* Emphasis added unless otherwise noted.

Abbreviations/Definitions

- ROG 11: Samsung's Interrogatory No. 11
- *Headwater Research LLC v. Samsung Elecs. Am., Inc.*, Case No. 2:22-cv-00422 (E.D. Tex.) (hereinafter "*HWI*")

As confirmed by Headwater's Response, Dr. Groehn's conjoint analysis must be struck because neither of Headwater's damages experts can connect the conjoint analysis to the facts of the case. Specifically, Headwater does not dispute Dr. Groehn's analysis was done in a vacuum, and Headwater now tries to justify Dr. Groehn's analysis only by saying, "[p]ut simply, Dr. Groehn conducted a consumer survey, and that was the result." Dkt. 199 at 13. They then suggest it is Mr. Dell who will provide the appropriate patent context for Dr. Groehn's numbers. But Mr. Dell incorrectly assumed Dr. Groehn's opinions actually isolated the purported benefit of the patents and the accused features.

Moreover, Headwater misses other critical points that prove the unreliability of Dr. Groehn's survey. First, as established by Dr. Groehn's own cited literature, conjoint analysis cannot reliably identify "pricing" or "incremental profit" of an individual feature of a smartphone divorced from the complex real-world market. Dkt. 181-4 (Allenby 2019) at GROEHN_00003439 ("[C]onjoint analysis can only estimate demand. Conjoint survey data, alone, cannot be used to compute market equilibrium outcomes such as market prices. . . ."). Second, Headwater admits that Dr. Groehn ultimately was assigned with the impossible task of putting an actual profit number on a feature that Headwater's experts all admit is subjective. As Dr. Groehn has consistently testified, the subjective measure of "battery life" varies greatly depending on the user and their individual practices. Regardless, Dr. Groehn improperly offers an objective, exact price measurement stemming from this subjective basis.

I. NEITHER DR. GROEHN NOR MR. DELL CONNECT DR. GROEHN'S CALCULATIONS TO THE FACTS OF THE CASE

Headwater admits Dr. Groehn analyzed only a broad, subjective feature (battery life) that is not an accused feature in this case, and that he did so with **no understanding of the facts of this case**. Dkt. 199 at 3 (stating Dr. Groehn's goal was only to "measure the economic value of

increased battery life”). Headwater does not dispute that Dr. Groehn had no understanding of the asserted patents, the alleged benefits of the patents, never spoke to the technical experts, never reviewed a single Samsung-produced document in this case, and never read any Samsung witness deposition in this case. Dkt. 181-3 (Groehn Rough Tr.) at 26:16–27:5, 27:6–9, 27:16–19, 27:24–28:3, 29:8–10, 32:21–24, 32:25–33:3, 35:1–3, 37:5–8.

As Headwater cites in its motion to strike Mr. Perryman’s opinions, “[i]f an expert ‘fails to tie the theory to the facts of the case, the testimony must be excluded.’” Dkt. 182 at 10 (citing *Uniloc USA, Inc. v. Microsoft Corp.*, 632 F.3d 1292, 1315 (Fed. Cir. 2011)). Trying to sidestep this failure, Headwater argues that Dr. Groehn’s untethered analysis remains admissible because it is Mr. Dell that supposedly ties Dr. Groehn’s results to the value of the patents. Dkt. 199 at 10 (“the incremental profit per unit directly attributable to the patented contribution to battery life.”). Not so;¹ instead, it is Mr. Dell who relies on Dr. Groehn’s analysis to tie the purported value of the patents to “the value of battery life savings to smartphone users, and by extension, the value to Samsung.” Dkt. 186-1 (Dell Rpt.) ¶ 304. At best, Dr. Groehn’s survey is simply a general survey regarding battery life savings—it is not tied in any way to battery life savings by the patented features. As Headwater readily admits, “Dr. Groehn did not analyze anything related to push notifications,” and yet offers the exact same opinions here as in the *HWI* case, which accused power-savings features. Dkt. 199 at 9. As Headwater argues in its opposition, “in *Fractus, S.A. v. Samsung*, the court excluded survey evidence . . . [that] punishes beyond the reach of the statute.

¹ This also confirms the unreliability of Dr. Groehn’s analysis in this case: he jumps from broad, irrelevant battery life survey results to offering calculations of Samsung’s **profits**. Dr. Groehn clearly states (and Headwater ignores) that for his “profit” calculations, he assumes zero costs, rendering his “profit” calculations not actual profits in any meaningful sense of the term. Ex. E (Groehn 5/13/2024 Dep.) at 100:5-19, 106:12-107:9 (“...under the assumption that including or excluding this feature has zero marginal cost...”); 128:17-129:13. Headwater ignores this.

No. 6:09-cv-208-LED-JDL, 2011 WL 7563820, at *1 (E.D. Tex. Apr. 29, 2011).” Dkt. 199 at 11. Headwater cannot be allowed to present the same damages theory as in *HWI* here.

II. HEADWATER AGREES “BATTERY LIFE” IS UNDEFINED

Dr. Groehn’s survey also must be found irrelevant and unreliable because the survey measured only a subjective feature as imagined by each individual respondent. *See Earl v. Boeing Co.*, No. 4:19-cv-507, 2021 WL 3140545, at *8 (E.D. Tex. July 26, 2021) (“district courts nationwide have overwhelmingly found conjoint analyses insufficient when they measure ‘only consumers’ **subjective** valuation or willingness to pay’—i.e., demand factors”). At his deposition, Dr. Groehn could not offer any testimony to tie “battery life” to any **objective** measure of valuation:

Q: And battery life is typically described to consumers in hours. Correct?

A: I think **it depends**.

Q: What does it depend on?

A: . . . [B]attery life really depends on the experience or the situation of **each individual consumer**.

...

Q: Time is in terms of hours and minutes. Correct?

A: . . . Talk time very much depends on the distance from the signal mass from the antenna, from – it might depend on the weather and other parameters that are – that are **unique to each individual consumer** that use the phone.

Q: But talk time, video playback time, that’s a measure of time. Right? . . .

A: Yes, but with the caveat that we know that talk time, for example, **very much depends on the personal circumstances of each consumer** for whom we are measuring talk time.

Ex. F (Groehn 10/18/2024 Dep.) 91:13–93:06. Headwater admits as much, acknowledging the survey measures “[w]hat standard battery life means for a given respondent ‘depends on the situation of each individual respondent Each respondent will experience battery life in a different way’” Dkt. 199 at 12. Indeed, if Dr. Groehn was offering a consumer’s “willingness to pay” for that subjective feature, then it would run directly afoul of *Earl*’s holding. But Dr. Groehn is suggesting the **actual** profit value of the **subjective** battery life. Dr. Groehn’s subjective

survey of “battery life” thus poses an even greater risk than the survey of cell phone antennae (an objectively observable, physical attribute) excluded in *Fractus, S.A. v. Samsung*, No. 6:09-cv-203-LED-JDL, 2011 WL 7563820, at *1 (E.D. Tex. Apr. 29, 2011). The *Fractus* court reiterated “[a]llowing the jury to hear such evidence not tied to the claimed invention risks ‘compensation for infringement [that] punishes beyond the reach of the statute,’” and that “admissible expert testimony must ‘carefully tie proof of damages to the claimed invention’s footprint in the market place.’” *Fractus* at *1 (quoting *ResQNet.com, Inc. v. Lansa, Inc.*, 594 F.3d 860, 869 (Fed. Cir. 2010)).

III. DR. GROEHN IS DISTINGUISHABLE FROM HEADWATER’S CASES

Dr. Groehn’s analysis’ unreliability and disconnect from the facts of this case are markedly different from the types of survey evidence held admissible in Headwater’s cited cases. In *Earl*, 2021 WL 3140545, at *6–9, the court found each of movant’s narrow arguments lacking in specificity and each going to the weight of his report, not admissibility, particularly where many arguments were “incomplete at best, and misleading at worst” and contradicted “what *Defendants’ own expert* stated when deposed.” *Id.* at *8, n.7 (emphasis original). Conversely, here, all experts agree “battery life” is too subjective to be meaningfully tested, and Dr. Groehn’s survey is simply too disconnected from the facts of the case. It is Headwater’s burden to prove otherwise, and they have not. *Id.* at *1 (reiterating that “[t]he party offering an expert’s testimony must prove ‘(1) the expert is qualified, (2) the evidence is relevant to the suit, and (3) the evidence is reliable.’” (citations omitted)) In *Estech*, the Court admitted a conjoint survey regarding “based on seven attributes: five attributes corresponding to patented features, one distractor attribute, and one price attribute.” *Estech Sys. IP, LLC v. Carvana LLC*, No. 2:21-CV-00482-JRG-RSP, 2023 WL 2934920, at *2 (E.D. Tex. Apr. 13, 2023). The *Estech* court found the expert connected the survey to the alleged patented benefits by citing the asserted patents directly for support that the surveyed

VoIP features were, in fact, the alleged benefit of the patents. *Id.* at *3 (“*see also* ’684 Patent at 12:24–44 and 14:30–46 (describing advantage of the ’684 Patent invention as it relates to voice data transmission)”). Headwater and Dr. Groehn offer no such citations connecting the broad concept of “battery life” surveyed by Dr. Groehn to the text of the asserted patents. They do not because 1) Dr. Groehn admitted he knew nothing of the asserted patents and accused features, Dkt. 181-3 (Groehn 10/18/2024 Rough Tr.) at 29:08–10, 27:06–09, 27:16–19) Headwater does not dispute that counsel simply instructed Dr. Groehn to survey the generic concept of “battery life,” Dkt. 181-3 (Groehn 10/18/2024 Rough Tr.) at 26:16–27:5, Dkt. 181-1 (Groehn Rpt.) ¶ 9. Dr. Groehn’s opinions and analysis should be excluded.

Dated: November 12, 2024

Respectfully submitted,

By: /s/ Thomas H. Reger II

Ruffin B. Cordell

TX Bar No. 04820550

Michael J. McKeon

DC Bar No. 459780

mckeon@fr.com

Jared Hartzman

DC Bar No. 1034255

hartzman@fr.com

FISH & RICHARDSON P.C.

1000 Maine Avenue, SW, Ste 1000

Washington, D.C. 20024

Telephone: (202) 783-5070

Facsimile: (202) 783-2331

Thad C. Kodish

GA Bar No. 427603

tkodish@fr.com

Benjamin K. Thompson

GA Bar No. 633211

bthompson@fr.com

Jonathan B. Bright

GA Bar No. 256953

jbright@fr.com

Christopher O. Green

GA Bar No. 037617

cgreen@fr.com

Noah C. Graubart

GA Bar No. 141862

graubart@fr.com

Sara C. Fish

GA Bar No. 873853

sfish@fr.com

Katherine H. Reardon

NY Bar No. 5196910

reardon@fr.com

Nicholas A. Gallo

GA Bar No. 546590

gallo@fr.com

Vivian C. Keller (*pro hac vice*)

GA Bar No. 651500

keller@fr.com

FISH & RICHARDSON P.C.

1180 Peachtree St. NE, Fl. 21
Atlanta, GA 30309
Telephone: (404) 892-5005
Facsimile: (404) 892-5002

Leonard E. Davis
TX Bar No. 05521600
ldavis@fr.com
Andria Rae Crisler
TX Bar No. 24093792
crisler@fr.com
Thomas H. Reger II
Texas Bar No. 24032992
reger@fr.com
FISH & RICHARDSON P.C.
1717 Main Street, Suite 5000
Dallas, TX 75201
Telephone: (214) 747-5070
Facsimile: (214) 747-2091

John-Paul R. Fryckman (*pro hac vice*)
CA Bar No. 317591
John W. Thornburgh
CA Bar No. 154627
thornburgh@fr.com
FISH & RICHARDSON P.C.
12860 El Camino Real, Ste. 400
San Diego, CA 92130
Telephone: (858) 678-5070
Facsimile: (858) 678-5099

Katherine D. Prescott (*pro hac vice*)
CA Bar No. 215496
prescott@fr.com
FISH & RICHARDSON P.C.
500 Arguello Street
Suite 400
Redwood City, CA 94063
Telephone: (650) 839-5180
Facsimile: (650) 839-5071

Kyle J. Fleming (*pro hac vice*)
NY Bar No. 5855499
kfleming@fr.com
FISH & RICHARDSON P.C.
7 Times Square, 20th Floor,
New York, NY 10036

Telephone: (212) 765-5070
Facsimile: (212) 258-2291

Melissa R. Smith
State Bar No. 24001351
Melissa@gillamsmithlaw.com
GILLAM & SMITH, LLP
303 South Washington Avenue
Marshall, Texas 75670
Telephone: (903) 934-8450
Facsimile: (903) 934-9257

Andrew Thompson ("Tom") Gorham
State Bar No. 24012715
tom@gillamsmithlaw.com
GILLAM & SMITH, LLP
102 N. College, Suite 800
Tyler, Texas 75702
Telephone: (903) 934-8450
Facsimile: (903) 934-9257

Michael E. Jones
State Bar No. 10929400
mikejones@potterminton.com
Shaun W. Hassett
State Bar No. 24074372
shaunhassett@potterminton.com
POTTER MINTON, P.C.
102 N. College Ave., Suite 900
Tyler, Texas 75702
Telephone: (903) 597-8311
Facsimile: (903) 593-0846

Lance Lin Yang
CA. Bar No. 260705
Lanceyang@quinnemanuel.com
Kevin (Gyushik) Jang
CA Bar No. 337747
kevinjang@quinnemanuel.com
Sean S. Pak
CA Bar No. 219032
seanpak@quinnemanuel.com
**QUINN EMANUEL URQUHART &
SULLIVAN, LLP**
50 California Street, 22nd Floor
San Francisco, CA 94111

Telephone: (415) 875-6600

Brady Huynh (admitted *pro hac vice*)

CA Bar No. 339441

bradyhuynh@quinnemanuel.com

**QUINN EMANUEL URQUHART &
SULLIVAN, LLP**

555 Twin Dolphin Drive, 5th Floor

Redwood Shores, CA 94065

Telephone: (650) 801-5000

Facsimile: (650) 801-5100

Jon Bentley Hyland

Texas Bar No. 24046131

jhyland@hilgersgraben.com

Grant K. Schmidt

Texas Bar No. 24084579

gschmidt@hilgersgraben.com

HILGERS GRABEN PLLC

7859 Walnut Hill Lane, Suite 335

Dallas, Texas 75230

Telephone: (972) 645-3097

ATTORNEYS FOR DEFENDANTS

SAMSUNG ELECTRONICS CO., LTD. AND

SAMSUNG ELECTRONICS AMERICA, INC.

CERTIFICATE OF SERVICE

I hereby certify that a true and correct copy of the foregoing document was filed electronically in compliance with Local Rule CV-5 on November 12, 2024. As of this date, all counsel of record had consented to electronic service and are being served with a copy of this document through the Court's CM/ECF system under Local Rule CV-5(a)(3)(A).

Thad C. Kodish